



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

**Principal Facts for Gravity Stations in the Antelope Valley–Bedell Flat area,
West–Central Nevada**

By Eleanore B. Jewel¹, David A. Ponce¹, and Robert L. Morin¹

Open–File Report 00–506

2000

U.S. DEPARTMENT OF THE INTERIOR
BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY
Charles G. Groat, Director

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic Code. Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

¹ U.S. Geological Survey, 345 Middlefield Road, Menlo Park, CA 94025

Table of Contents

INTRODUCTION.....	1
ACKNOWLEDGMENTS.....	1
GRAVITY METHODS.....	1
ISOSTATIC GRAVITY ANOMALIES.....	6
PHYSICAL PROPERTY DATA.....	6
REFERENCES CITED	9

Illustrations

FIGURE 1. INDEX MAP OF STUDY AREA.....	2
2. TOPOGRAPHIC MAP OF STUDY AREA.....	3
3. ISOSTATIC GRAVITY MAP.....	4
4. LOCATION OF ROCK SAMPLES.....	8

Tables

TABLE 1. PHYSICAL PROPERTY MEASUREMENTS FOR ROCKS IN THE ANTELOPE VALLEY-BEDELL FLAT AREA.....	7
2. PRINCIPAL FACTS OF GRAVITY STATIONS IN THE ANTELOPE VALLEY-BEDELL FLAT AREA.....	10

INTRODUCTION

In April 2000 the U.S. Geological Survey (USGS) established 211 gravity stations in the Antelope Valley and Bedell Flat area of west-central Nevada (Figure 1). The stations were located about 15 miles north of Reno, Nevada, southwest of Dogskin Mountain, and east of Petersen Mountain, concentrated in Antelope Valley and Bedell Flat (figure 2). The ranges in this area primarily consist of normal-faulted Cretaceous granitic rocks, with some volcanic and metavolcanic rocks.

The purpose of the survey was to characterize the hydrogeologic framework of Antelope Valley and Bedell Flat in support of future hydrologic investigations. The information developed during this study can be used in ground-water models.

Gravity data were collected between latitude 39°37.5' and 40°00' N and longitude 119°37.5' and 120°00' W. The stations were located on the Seven Lakes Mountain, Dogskin Mountain, Granite Peak, Bedell Flat, Fraser Flat, and Reno NE 7.5 minute quadrangles. All data were tied to secondary base station RENO-A located on the campus of the University of Nevada at Reno (UNR) in Reno, Nevada (latitude 39°32.30' N, longitude 119°48.70' W, observed gravity value 979674.69 mGal). The value for observed gravity was calculated by multiple ties to the base station RENO (latitude 39°32.30' N, longitude 119°48.70' W, observed gravity value 979674.65 mGal), also on the UNR campus. The isostatic gravity map (figure 3) includes additional data sets from the following sources: 202 stations from a Geological Survey digital data set (Ponce, 1997), and 126 stations from Thomas C. Carpenter (written commun., 1998).

ACKNOWLEDGMENTS

This study was prepared in cooperation with the Washoe County Department of Water Resources and with David L. Berger of the U.S. Geological Survey, Water Resources Division.

GRAVITY METHODS

All gravity data were reduced using standard gravity corrections, including: (a) the earth-tide correction, which corrects for tidal effects of the moon and sun; (b) instrument drift correction, which compensates for drift in the instrument's spring; (c) the latitude correction, which incorporates the variation of the Earth's gravity with latitude; (d) the free-air correction, which accounts for the variation in gravity due to elevation relative to sea-level; (e) the Bouguer correction, which corrects for the attraction of material between the station and sea-level; (f) the curvature correction, which corrects the Bouguer correction for the effect of the Earth's curvature; (g) the terrain correction, which removes the effect of topography to a radial distance of 166.7 km; and (h) the isostatic correction, which removes long-wavelength variations in the gravity field inversely related to topography.



Figure 1. Index map of study area.

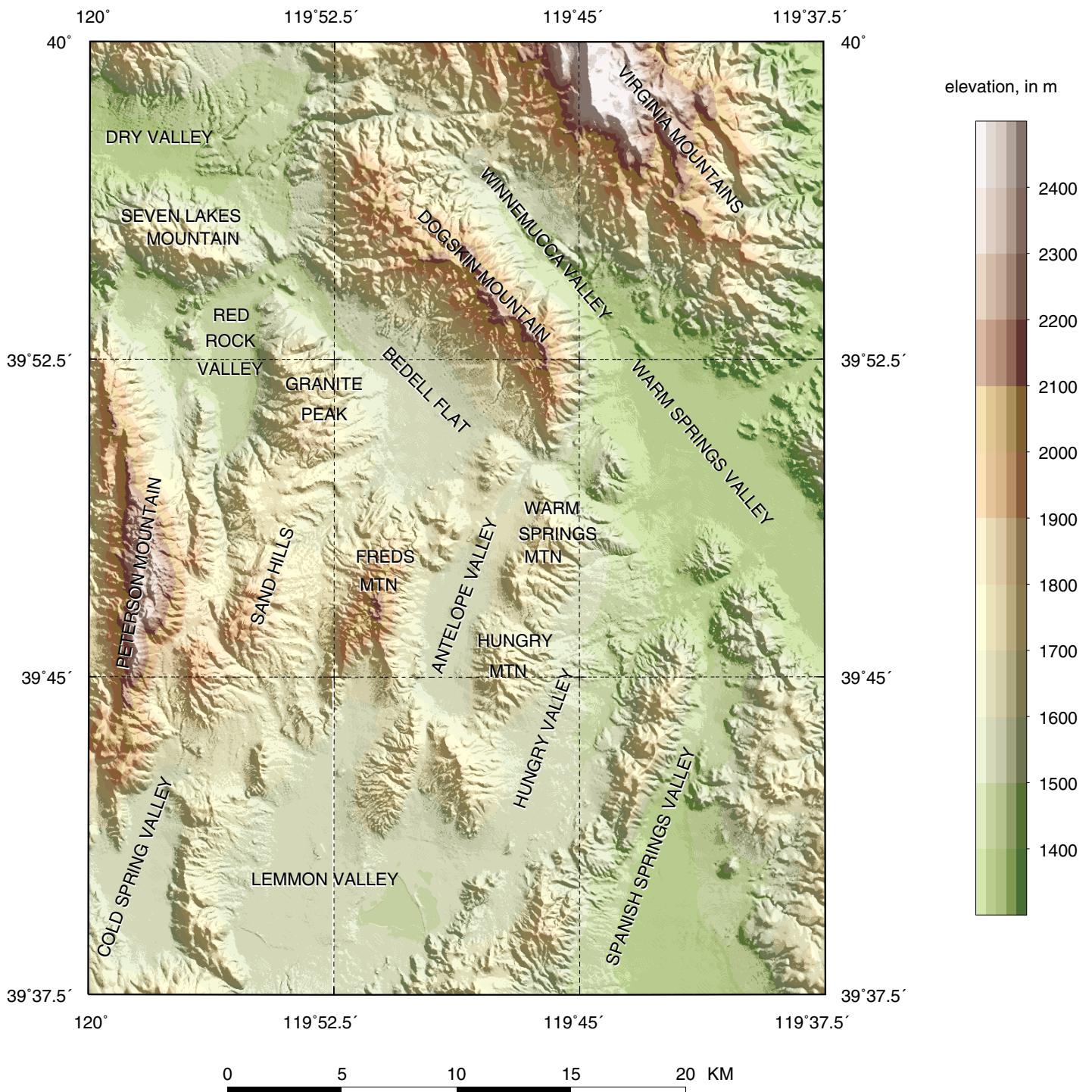


Figure 2. Topographic map of study area.

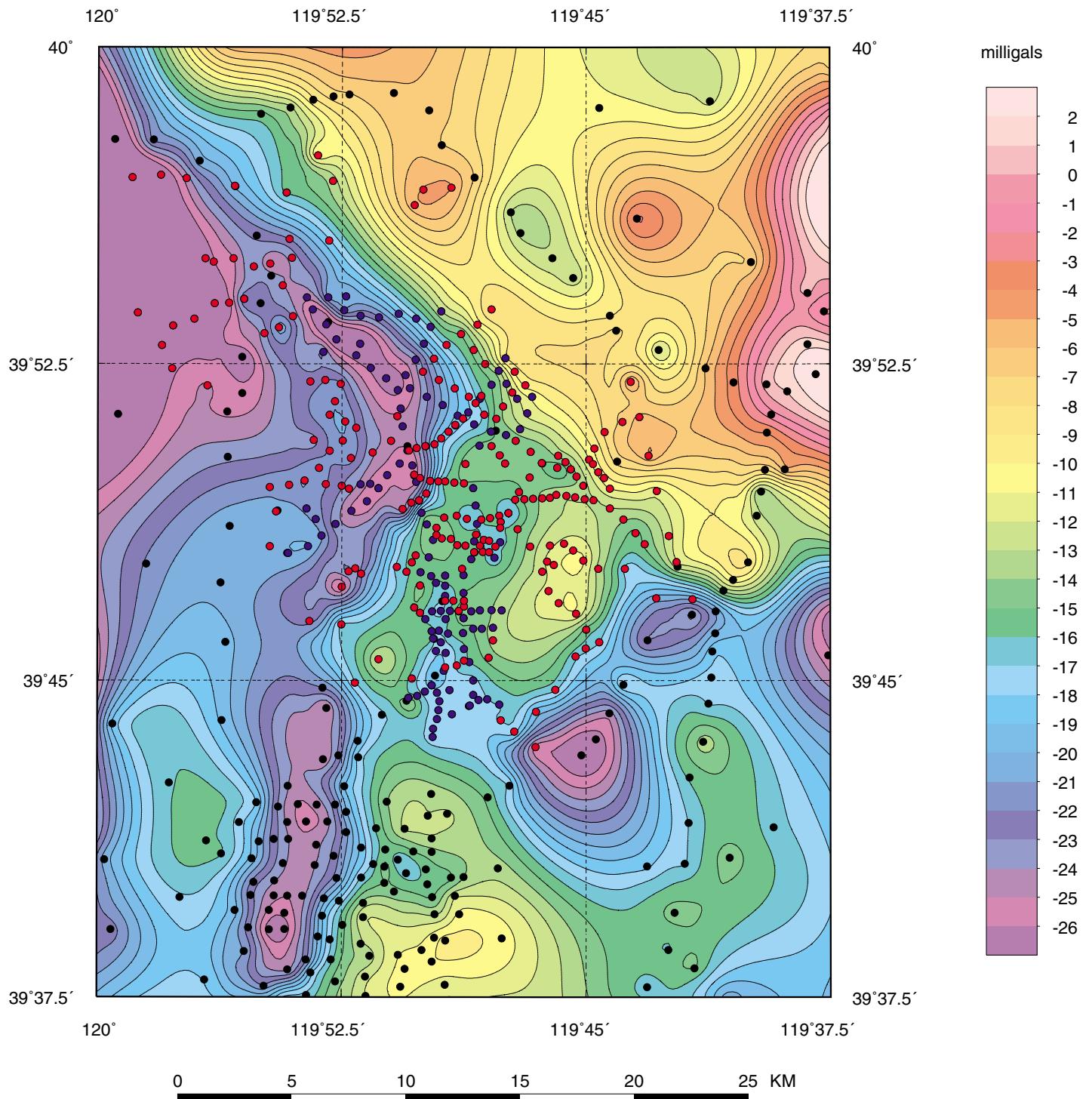


Figure 3. Isostatic gravity map. Black dots, previous data (Ponce, 1997); blue dots, Carpenter data (written commun., 1998); red dots, new USGS data.

Conversion of meter readings to milligals was made using factory calibration constants. The gravity meter (LaCoste and Romberg G17C) also has an additional calibration factor (1.00078), which has been determined by multiple gravity readings over the Mt. Hamilton calibration loop east of San Jose, Calif. (Barnes and others, 1969). Observed gravity values were based on a time-dependant linear drift between successive base readings. Observed gravity values were referenced to the International Gravity Standardization Net 1971 (IGSN 71) gravity datum (Morelli, 1974, p. 18). Free-air gravity anomalies were calculated using the Geodetic Reference System 1967 formula for theoretical gravity on the ellipsoid (International Union of Geodesy and Geophysics, 1971, p. 60) and Swick's formula (1942, p. 65) for the free-air correction. Bouguer, curvature, and terrain corrections were added to the free-air correction to determine the complete Bouguer anomaly at a standard reduction density of 2.67 g/cm^3 . Finally, a regional isostatic gravity field was removed from the Bouguer field assuming an Airy–Heiskanen model for isostatic compensation of topographic loads (Jachens and Roberts, 1981) with an assumed crustal thickness of 25 km, a crustal density of 2.67 g/cm^3 , and a density contrast across the base of the model of 4.0 g/cm^3 . Gravity values are expressed in milligals (mGal), a unit of acceleration or gravitational force per mass equal to 10^{-5} m/s^2 .

Station locations were obtained using a portable Global Positioning System (GPS) unit and have a horizontal uncertainty of about 10 m (30 ft) or less. Elevations were obtained using a differential GPS; Trimble Real Time Kinematic (RTK) Series 4400 GPS receivers. These measurements have a vertical uncertainty of 5–10 cm (2–4 in). Most stations were surveyed in real time with a 6-m (20 ft) radio antenna located at a base station.

Terrain corrections, which account for the variation of topography near a gravity station, were computed using a combination of manual and digital methods. Terrain corrections consist of a three-part process: the innermost or field terrain correction (estimated in the field and typically extending to a radial distance of 53 to 68 m), inner-zone terrain correction, and outer-zone terrain correction.

Inner-zone terrain corrections were made using either Hayford and Bowie (1912) or Hammer (1939) systems that divide the terrain surrounding a gravity station into zones and equal area compartments. Average elevations for each compartment were manually estimated from the largest scale topographic maps available, usually USGS 1:24,000-scale maps. The terrain corrections were then calculated based on the average estimated elevation of each compartment. Inner-zone terrain corrections typically extend to a radial distance of 0.59 to 2.29 km. With the advent of computer processing and the availability of detailed digital elevation models (DEMs), modern day inner-zone terrain corrections were computed using USGS 7.5' DEMs with a resolution of 30 m derived from USGS 1:24,000-scale topographic maps.

Outer-zone terrain corrections, to a radial distance of 166.7 km, were computed using a DEM derived from USGS 1:250,000-scale topographic maps and an automated procedure (Plouff, 1966; Plouff, 1977; Godson and Plouff, 1988). Digital terrain corrections are calculated by computing the gravity effect of each grid cell using the distance and difference in elevation of each grid cell from the gravity station. Principal facts of these data are shown in table 2.

ISOSTATIC GRAVITY ANOMALIES

In general, isostatic gravity anomalies reflect lateral (horizontal) density variations in the middle to upper crust. Thus, gravity anomalies can be used to infer the subsurface structure of known or unknown geologic features. Gravity anomalies often reflect carbonate rocks, calderas, deep sedimentary basins, and linear geologic features such as faults. Many of these features play an important role as aquifers or confining units and their distribution is important to the understanding of the hydrogeologic framework of the area. Pre-Cenozoic granitic rocks underlie most of the region and their subsurface distribution is especially important in evaluating the hydrogeology of an area. Tertiary volcanic rocks and Quaternary and Tertiary alluvial deposits occur throughout the study area, and may play an important role in the hydrology of the study area.

As expected, gravity highs occur over pre-Cenozoic metavolcanic and granitic rocks that typically have densities on the order of 2.67 g/cm^3 . Gravity highs occur over the Dogskin Mountain, Virginia Mountains, and Warm Springs Mountain. Gravity lows over Antelope Valley and Bedell Flat reflect shallow sedimentary basins filled with low-density alluvial deposits with densities ranging from about 1.60 to 2.20 g/cm^3 or volcanic rocks with densities of about 2.20 to 2.50 g/cm^3 .

The diverse physical properties of lithologies that underlie this region are well suited to geophysical investigations. The contrast in density between pre-Cenozoic basement and overlying unconsolidated alluvium, for example, produces a distinctive pattern of gravity anomalies that can be used to determine the depth of pre-Cenozoic basement in three dimensions. In most parts of the study area, this surface corresponds to the top of the granitic rocks, an important element of the hydrogeologic framework.

PHYSICAL PROPERTY DATA

Along with gravity measurements, rock samples were collected at locations shown in figure 4. Densities were measured in the laboratory using a precision electronic balance. Grain density, saturated bulk density, and dry bulk density were measured for each sample. Magnetic susceptibilities were measured using a Geophysica KT-5 susceptibility meter. These measurements are useful for gravity modeling and gravity inversion calculations. These data along with the rock identification and mapped geologic unit (Bonham, 1969) are shown in table 1.

Table 1. Physical property measurements for rocks in the Antelope Valley–Bedell Flat area.

[Latitudes and longitudes are on the North American Datum 1927 (NAD27). Kgd, Cretaceous granodiorite; mv, metavolcanic; Susc, magnetic susceptibility; Th, rhyolite. Mapped geologic units from Bonham (1969).]

Station id	Latitude degrees minutes		Longitude degrees minutes		Grain bulk	Density (g/cm ³) Saturated bulk	Dry bulk	Susc cgs units x 10 ⁻³	Map unit
00REN012	39	50.70	119	53.37	2.61	2.58	2.57	0.22	Kgd
00REN016	39	55.01	119	54.04	2.47	2.28	2.15	0.11	Th
00REN020	39	57.44	119	53.25	2.32	2.19	2.09	0.01	Th
00REN039A	39	47.74	119	45.98	3.04	3.03	3.03	6.52	Kgd
00REN039B	39	47.74	119	45.98	3.01	2.98	2.97	4.36	Kgd
00REN041	39	48.24	119	45.68	2.76	2.74	2.72	1.97	Kgd
00REN061	39	46.65	119	48.91	2.73	2.70	2.68	1.32	Kgd
00REN076A	39	53.79	119	47.91	2.79	2.78	2.77	1.70	Kgd
00REN076B	39	53.79	119	47.91	2.73	2.71	2.69	1.81	Kgd
00REN085	39	50.33	119	47.65	2.71	2.68	2.66	1.20	Kgd
00REN086	39	50.14	119	47.49	2.72	2.68	2.65	1.55	Kgd
00REN092	39	48.33	119	48.14	2.46	2.38	2.32	0.28	Kgd
00REN093	39	48.31	119	47.98	2.32	2.28	2.25	0.02	Kgd
00REN104	39	53.36	119	54.44	2.62	2.60	2.60	0.53	Kgd
00REN112	39	52.03	119	52.54	2.61	2.57	2.55	0.15	Kgd
00REN141	39	49.33	119	46.11	2.73	2.69	2.67	1.44	Kgd
00REN164A	39	49.55	119	44.27	2.73	2.70	2.69	1.57	Kgd
00REN164B	39	49.55	119	44.27	2.81	2.77	2.75	0.77	Kgd
00REN169	39	48.86	119	49.35	2.74	2.72	2.71	1.74	Kgd
00REN177	39	47.96	119	50.23	2.71	2.69	2.67	0.89	mv
00REN180	39	47.69	119	50.81	2.75	2.72	2.70	0.03	mv
00DAP101A	39	51.81	119	53.42	2.63	2.54	2.48	1.17	Kgd
00DAP101B	39	51.81	119	53.42	2.63	2.56	2.51	1.09	Kgd
00DAP102	39	50.65	119	53.55	2.65	2.63	2.62	0.37	Kgd
00DAP103	39	51.99	119	47.04	2.70	2.68	2.67	0.97	Kgd
00DAP104	39	53.68	119	56.67	2.40	2.36	2.34	0.13	Th
00DAP105	39	54.89	119	56.53	2.19	2.11	2.05	0.04	Th
00DAP106A	39	47.82	119	50.31	2.80	2.77	2.75	1.22	mv
00DAP106B	39	47.82	119	50.31	2.78	2.78	2.77	4.19	mv

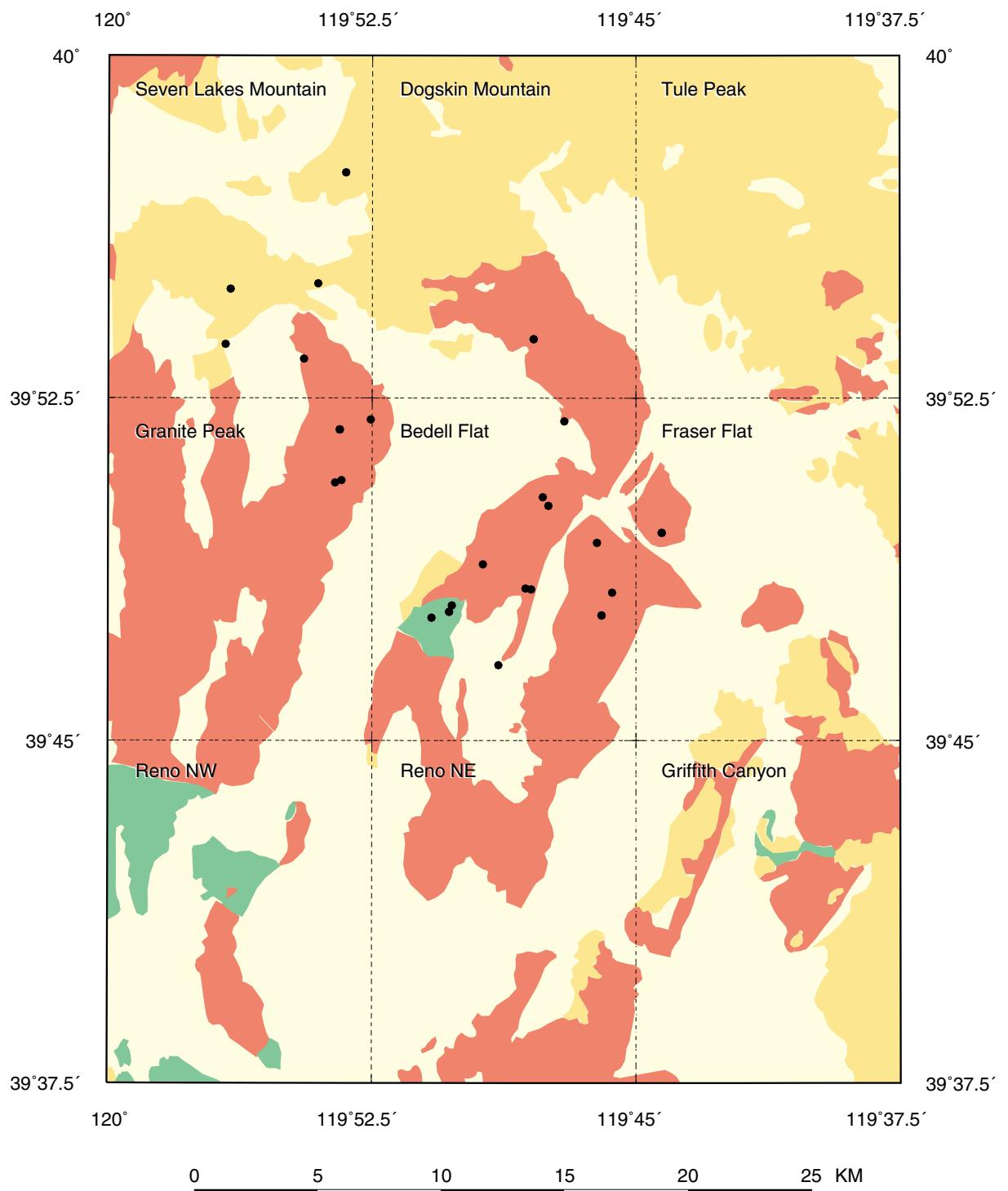


Figure 4. Location of rock samples are shown as black dots. Geologic units from Bonham (1969): Yellow, alluvium; orange, Tertiary volcanic rocks; red, granitic rocks; green, pre-Cenozoic rocks.

REFERENCES CITED

- Barnes, D.F., Oliver, H.W., and Robbins, S.L., 1969, Standardization of gravimeter calibrations in the Geological Survey: *Eos, Transactions, American Geophysical Union*, v. 50, no. 10, p. 626–627.
- Bonham, H.F., 1969, Geology and mineral deposits of Washoe and Storey Counties, Nevada: Nevada Bureau of Mines and Geology Bulletin 70, 140 p.
- Godson, R.H., and Plouff, Donald, 1988, BOUGUER version 1.0, a microcomputer gravity–terrain–correction program: U.S. Geological Survey Open–File Report 88–644–A, Documentation, 22 p.; 88–644–B, Tables, 61 p., 88–644–C, 5 1/4–inch diskette.
- Hammer, Sigmund, 1939, Terrain corrections for gravimeter stations: *Geophysics*, v. 4, p. 184–194.
- Hayford, J.F., and Bowie, William, 1912, The effect of topography and isostatic compensation upon the intensity of gravity: U.S. Coast and Geodetic Survey Special Publication no. 10, 132 p.
- International Union of Geodesy and Geophysics, 1971, Geodetic Reference System 1967: International Association of Geodesy Special Publication no. 3, 116 p.
- Jachens, R.C., and Roberts, C.W., 1981, Documentation of a FORTRAN program, 'isocomp', for computing isostatic residual gravity: U.S. Geological Open–File Report 81–574, 26 p.
- Morelli, C., ed, 1974, the International gravity standardization net 1971: International Association of Geodesy Special Publication no. 4, 194 p.
- Plouff, Donald, 1966, Digital terrain corrections based on geographic coordinates [abs.]: *Geophysics*, v. 31, no. 6, p. 1208.
- Plouff, D., 1977, Preliminary documentation for a FORTRAN program to compute gravity terrain corrections based on topography digitized on a geographic grid: U.S. Geological Survey Open–File Report 77–535, 45 p.
- Ponce, D.A., 1997, Gravity data of Nevada: U.S. Geological Survey Digital Data Series DDS–42, 27 p., CD–ROM.
- Swick, C.A., 1942, Pendulum gravity measurements and isostatic reductions: U.S. Coast and Geodetic Survey Special Publication 232, 82 p.

Table 2. Principal facts of gravity stations in the Antelope Valley–Bedell Flat area.

[Latitudes and longitudes on the North American Datum 1927 (NAD27). CBA, complete Bouguer anomaly; Elev, elevation; FAA, free-air anomaly; ISO, isostatic anomaly; OG, observed gravity; SBA, simple Bouguer anomaly; TC, terrain correction.]

Station	Lat deg min	Long deg min	Elev ft	OG mGal	FAA mGal	SBA mGal	TC inner mGal	TC total mGal	CBA mGal	ISO mGal
Previous data (Ponce 1997)										
M 32	39 53.74	119 37.69	4412.7	979738.06	-6.70	-157.21	0.09	1.84	-156.70	-2.07
M 33	39 54.18	119 38.19	4619.4	979727.50	1.51	-156.04	1.08	3.26	-154.14	0.42
M 34	39 52.96	119 38.19	4386.5	979741.88	-4.16	-153.77	0.25	1.84	-153.25	1.69
E1700	39 40.76	119 59.78	5096.0	979654.25	-7.01	-180.82	0.06	1.38	-180.86	-20.55
F 05	39 42.58	119 57.79	5153.0	979657.12	-1.51	-177.26	0.05	2.73	-175.96	-16.18
F 07	39 48.02	119 54.17	5667.0	979633.69	15.30	-177.98	0.23	1.44	-178.01	-20.11
F 08	39 51.37	119 56.02	4790.0	979685.88	-19.91	-183.28	0.22	2.15	-182.52	-25.21
F 09	39 57.82	119 59.49	4418.0	979716.38	-33.91	-184.59	0.01	1.67	-184.25	-28.77
F 12	39 47.70	119 42.19	4455.0	979714.75	-17.10	-169.04	0.02	0.90	-169.48	-12.41
G 3X	39 57.81	119 58.30	4483.0	979719.69	-24.51	-177.41	0.02	1.68	-177.07	-21.61
G001D	39 54.54	119 45.39	4584.0	979715.00	-14.86	-171.20	0.43	4.47	-168.09	-12.61
G001S	39 45.07	119 41.15	4592.0	979696.38	-18.66	-175.28	0.13	1.70	-174.94	-17.34
G002D	39 55.00	119 46.04	4685.0	979709.50	-11.55	-171.34	0.50	4.55	-168.16	-12.78
G002S	39 45.69	119 41.12	4565.0	979698.50	-20.02	-175.72	0.08	1.36	-175.71	-18.28
G003R	39 43.23	119 45.15	4944.0	979662.38	-16.85	-185.47	0.03	0.60	-186.28	-27.72
G003S	39 46.12	119 41.04	4493.0	979701.69	-24.23	-177.47	0.30	1.63	-177.18	-19.88
G004D	39 55.60	119 47.01	4870.0	979699.19	-5.35	-171.45	0.09	4.22	-168.62	-13.40
G004R	39 44.83	119 53.09	5399.0	979642.38	3.54	-180.60	0.08	1.25	-180.80	-21.97
G004S	39 46.64	119 41.02	4461.0	979704.00	-25.70	-177.85	0.02	1.18	-178.01	-20.87
G005D	39 56.09	119 47.31	4880.0	979700.25	-4.04	-170.48	0.04	3.67	-168.20	-13.07
G005R	39 44.35	119 52.97	5346.0	979641.88	-1.23	-183.56	0.05	1.00	-184.01	-25.05
G005S	39 47.13	119 40.78	4421.0	979714.25	-19.89	-170.68	0.04	1.31	-170.70	-13.69
G006D	39 56.92	119 48.43	5123.0	979694.38	11.67	-163.06	0.13	2.50	-161.98	-7.06
G006S	39 47.38	119 40.48	4397.0	979719.12	-17.71	-167.67	0.29	1.66	-167.34	-10.46
G007S	39 47.80	119 40.02	4375.0	979723.38	-16.11	-165.32	0.04	1.07	-165.58	-8.86
G008D	39 57.68	119 49.44	5472.0	979675.50	24.44	-162.19	0.31	1.99	-161.66	-6.99
G009D	39 58.50	119 49.82	5280.0	979689.12	18.79	-161.29	0.04	2.20	-160.53	-6.07
G009S	39 49.47	119 39.62	4243.0	979729.00	-25.39	-170.11	0.01	1.04	-170.37	-14.17
G010D	39 58.92	119 50.91	5271.0	979690.00	18.21	-161.56	0.13	2.26	-160.74	-6.31
G010S	39 49.99	119 39.51	4242.0	979736.19	-19.06	-163.74	0.01	1.13	-163.91	-7.85
G012D	39 58.88	119 52.28	5124.0	979698.12	12.57	-162.20	0.08	1.96	-161.66	-7.10
G012S	39 50.87	119 39.45	4335.0	979736.12	-11.71	-159.56	0.07	1.09	-159.79	-4.02
G013D	39 58.83	119 52.78	4977.0	979706.38	7.11	-162.64	0.10	1.86	-162.18	-7.53
G013S	39 51.30	119 39.31	4235.0	979745.00	-12.86	-157.30	0.03	1.46	-157.14	-1.47
G014D	39 58.75	119 53.40	4867.0	979711.25	1.79	-164.20	0.08	1.62	-163.98	-9.22
G015D	39 58.57	119 54.10	4784.0	979712.00	-5.04	-168.21	0.03	1.35	-168.24	-13.36
G015S	39 51.85	119 38.81	4212.0	979749.38	-11.44	-155.09	0.17	2.00	-154.39	1.04
G016D	39 58.42	119 55.00	4712.0	979713.88	-9.69	-170.40	0.08	1.36	-170.41	-15.38
G016S	39 52.25	119 37.94	4215.0	979753.50	-7.65	-151.41	0.01	1.83	-150.87	4.28
G018D	39 57.30	119 56.89	4509.0	979718.75	-22.21	-175.99	0.02	1.46	-175.88	-20.31
G023D	39 56.70	119 55.78	4573.0	979714.19	-19.90	-175.87	0.02	1.50	-175.72	-20.05
G024D	39 55.54	119 55.13	4895.0	979690.25	-11.81	-178.76	0.11	1.44	-178.72	-22.80
G026D	39 54.59	119 54.68	4868.0	979689.62	-13.63	-179.66	0.08	1.26	-179.79	-23.55
G027D	39 53.93	119 55.01	4753.0	979696.38	-16.67	-178.78	0.05	1.36	-178.80	-22.31
G027S	39 45.95	119 43.11	4623.0	979690.62	-22.84	-180.52	0.04	1.01	-180.87	-23.24
G028S	39 46.56	119 41.75	4519.0	979697.25	-26.83	-180.96	0.02	0.90	-181.41	-24.15
G029D	39 52.66	119 55.56	4724.0	979691.12	-22.80	-183.92	0.01	1.34	-183.96	-27.10
G030D	39 51.80	119 55.56	4761.0	979688.38	-20.76	-183.14	0.01	1.55	-182.97	-25.81
G033D	39 50.30	119 56.01	4932.0	979676.69	-14.16	-182.37	0.41	2.93	-180.85	-23.29
G033S	39 52.02	119 39.46	4362.0	979740.50	-6.49	-155.26	0.25	1.70	-154.88	0.55
G034D	39 48.66	119 55.94	5293.0	979654.12	-0.39	-180.91	0.64	4.10	-178.26	-20.34
G035S	39 52.06	119 40.47	4368.0	979736.12	-10.37	-159.35	0.17	1.59	-159.08	-3.51

Table 2. Principal facts of gravity stations in the Antelope Valley–Bedell Flat area.— Continued

Station	Lat	Long	Elev	OG	FAA	SBA	TC		CBA	ISO
	deg	min	deg	min	ft	mGal	mGal	inner mGal	total mGal	mGal
G037S	39 52.39	119 41.33	4386.0	979733.19	-12.08	-161.67	0.03	1.50	-161.50	-5.93
G039D	39 45.12	119 49.63	5115.0	979663.00	-2.98	-177.43	0.08	1.29	-177.57	-19.06
G039S	39 52.83	119 42.76	4381.0	979727.62	-18.79	-168.22	0.03	1.80	-167.74	-12.08
G040D	39 45.99	119 49.67	5146.0	979662.88	-1.45	-176.97	0.04	1.73	-176.66	-18.39
G041D	39 46.88	119 49.41	5188.0	979663.62	1.88	-175.06	0.03	1.55	-174.94	-16.99
G041S	39 53.29	119 44.07	4372.0	979731.69	-16.23	-165.35	0.03	3.28	-163.39	-7.67
G042D	39 48.03	119 48.42	5237.0	979664.38	5.57	-173.04	0.02	0.97	-173.51	-15.97
G042S	39 53.64	119 44.27	4414.0	979728.12	-16.39	-166.94	0.08	3.49	-164.78	-9.12
G043D	39 48.97	119 47.38	5241.0	979664.62	4.77	-173.99	0.02	0.88	-174.54	-17.40
G044D	39 49.85	119 50.28	5118.0	979664.88	-7.81	-182.37	0.01	0.91	-182.88	-25.65
G045D	39 50.00	119 45.47	4885.0	979690.62	-4.22	-170.83	0.02	1.37	-170.86	-14.14
G046D	39 50.14	119 46.35	5039.0	979680.38	-0.17	-172.03	0.08	1.42	-172.02	-15.30
G047D	39 50.55	119 50.49	5097.0	979668.25	-7.42	-181.26	0.01	0.85	-181.84	-24.77
G048D	39 50.92	119 47.77	5199.0	979672.88	6.22	-171.10	0.03	1.15	-171.39	-14.74
G049D	39 53.49	119 52.92	4848.0	979685.38	-18.09	-183.44	0.04	1.88	-182.95	-26.50
G050D	39 56.56	119 54.21	4797.0	979705.69	-7.14	-170.75	0.04	1.28	-170.85	-15.26
G051D	39 47.32	119 56.22	5748.0	979625.88	16.15	-179.89	0.19	2.93	-178.44	-20.27
G051S	39 48.91	119 39.75	4274.0	979727.75	-22.85	-168.62	0.01	0.93	-169.00	-12.61
G052D	39 49.02	119 54.48	5758.0	979630.25	18.97	-177.41	0.01	1.15	-177.75	-20.17
G053S	39 50.00	119 38.89	4283.0	979736.12	-15.31	-161.39	0.06	1.59	-161.11	-5.19
G10SS	39 37.74	119 43.13	4504.0	979690.12	-22.37	-175.98	0.01	0.72	-176.61	-16.68
G11SS	39 38.62	119 42.47	4498.0	979692.62	-21.73	-175.14	0.01	0.72	-175.77	-16.13
G12SS	39 39.50	119 42.28	4536.0	979693.50	-18.57	-173.28	0.01	0.72	-173.91	-14.54
G13SS	39 40.66	119 41.97	4529.0	979693.25	-21.15	-175.62	0.01	0.90	-176.07	-17.13
G14SS	39 41.63	119 41.85	4563.0	979692.88	-19.79	-175.42	0.02	1.13	-175.64	-16.96
G15SS	39 42.70	119 41.83	4618.0	979692.12	-17.00	-174.50	0.04	1.65	-174.21	-15.84
G16SS	39 43.55	119 41.41	4706.0	979691.25	-10.80	-171.30	0.02	1.32	-171.35	-13.36
G17SS	39 44.45	119 41.25	4605.0	979694.50	-18.42	-175.48	0.12	1.93	-174.91	-17.12
G20SS	39 43.61	119 44.69	4857.0	979669.25	-18.69	-184.35	0.02	0.83	-184.91	-26.53
G21SS	39 44.22	119 44.28	4807.0	979675.25	-18.29	-182.24	0.03	0.90	-182.73	-24.50
G22SS	39 44.90	119 43.86	4747.0	979687.62	-12.63	-174.54	0.05	1.05	-174.86	-16.86
G30SS	39 38.18	119 41.68	4493.0	979693.50	-20.66	-173.90	0.01	0.77	-174.47	-14.85
G31SS	39 40.80	119 40.59	4817.0	979679.19	-8.39	-172.68	0.07	0.94	-173.13	-14.54
H1100	39 45.60	119 37.56	4420.0	979700.00	-32.03	-182.78	0.02	1.55	-182.56	-25.61
H1457	39 44.40	119 48.60	5192.0	979658.88	1.20	-175.89	0.02	0.83	-176.49	-17.90
H1458	39 44.06	119 56.18	5771.0	979620.94	18.20	-178.63	0.25	1.81	-178.30	-19.22
H1462	39 43.97	119 59.53	6355.0	979584.12	36.43	-180.31	0.42	4.25	-177.57	-18.64
H6309	39 47.76	119 58.51	7850.0	979484.62	71.74	-196.00	1.88	18.29	-179.19	-21.87
H6310	39 51.31	119 59.38	7109.0	979526.50	38.72	-203.74	4.11	19.82	-185.44	-28.85
H6689	39 40.60	119 43.13	4576.0	979689.12	-20.82	-176.90	0.01	0.96	-177.29	-18.21
H6696	39 39.10	119 59.57	5208.0	979642.81	-5.51	-183.13	0.05	1.26	-183.31	-22.52
H6697	39 45.91	119 56.07	6006.0	979609.31	25.93	-178.91	0.31	2.30	-178.11	-19.68
LV001	39 39.21	119 52.47	5019.0	979662.19	-4.02	-175.21	0.01	0.72	-175.90	-15.40
LV007	39 38.76	119 51.91	4971.0	979666.44	-3.62	-173.16	0.01	0.76	-173.81	-13.20
LV011	39 38.48	119 51.64	4945.0	979667.00	-5.12	-173.78	0.01	0.81	-174.37	-13.70
LV015	39 38.50	119 50.76	4940.0	979670.12	-2.45	-170.93	0.01	0.76	-171.58	-11.00
LV019	39 39.39	119 51.83	4950.0	979670.00	-3.01	-171.83	0.01	0.70	-172.54	-12.12
LV026	39 40.00	119 50.89	4918.0	979670.50	-6.39	-174.12	0.01	0.67	-174.86	-14.69
LV030	39 40.21	119 51.18	4961.0	979667.88	-5.25	-174.45	0.03	0.66	-175.20	-15.09
LV031	39 40.59	119 51.18	5018.0	979665.75	-2.61	-173.76	0.04	0.67	-174.50	-14.53
LV033	39 40.76	119 50.77	4947.0	979667.75	-7.56	-176.28	0.02	0.75	-176.94	-17.03
LV036	39 41.00	119 51.16	5080.0	979661.69	-1.44	-174.70	0.06	0.76	-175.36	-15.52
LV038	39 41.50	119 51.44	5300.0	979649.06	5.83	-174.93	0.10	0.91	-175.46	-15.79
LV041	39 41.49	119 50.56	5116.0	979662.75	2.23	-172.25	0.28	1.26	-172.42	-12.77
LV046	39 40.95	119 50.29	4939.0	979670.69	-5.63	-174.08	0.01	0.75	-174.74	-14.92
LV048	39 40.44	119 50.51	4923.0	979669.25	-7.84	-175.75	0.01	0.67	-176.48	-16.50
LV050	39 40.53	119 49.91	4928.0	979670.00	-6.70	-174.78	0.01	0.64	-175.54	-15.63
LV051	39 40.94	119 49.73	4945.0	979671.00	-4.77	-173.43	0.01	0.68	-174.15	-14.40

Table 2. Principal facts of gravity stations in the Antelope Valley–Bedell Flat area.— Continued

Station	Lat deg min	Long deg min	Elev ft	OG mGal	FAA mGal	SBA mGal	TC inner mGal	TC total mGal	CBA mGal	ISO mGal
LV052	39 41.26	119 49.73	4992.0	979670.00	-1.83	-172.09	0.01	0.73	-172.77	-13.12
LV054	39 41.80	119 49.86	5085.0	979665.25	1.41	-172.02	0.02	0.95	-172.49	-12.99
LV057	39 42.31	119 49.75	5312.0	979652.00	8.69	-172.48	0.32	1.21	-172.72	-13.46
LV060	39 41.84	119 49.26	5180.0	979660.00	5.00	-171.67	0.14	0.94	-172.16	-12.78
LV061	39 40.17	119 49.87	4920.0	979669.88	-7.05	-174.86	0.01	0.62	-175.64	-15.64
LV063	39 40.33	119 49.14	4933.0	979669.88	-6.08	-174.32	0.01	0.61	-175.12	-15.25
LV064	39 40.34	119 48.75	4950.0	979670.19	-4.20	-173.03	0.01	0.63	-173.81	-14.00
LV066	39 40.55	119 47.71	4996.0	979668.44	-1.92	-172.32	0.02	0.66	-173.07	-13.47
LV070	39 39.87	119 49.72	4919.0	979670.00	-6.59	-174.36	0.01	0.62	-175.14	-15.06
LV072	39 39.90	119 49.02	4931.0	979672.44	-3.08	-171.26	0.01	0.64	-172.02	-12.05
LV077	39 39.46	119 49.64	4918.0	979671.25	-4.81	-172.54	0.01	0.66	-173.29	-13.10
LV079	39 39.47	119 48.89	4953.0	979671.56	-1.27	-170.20	0.02	0.74	-170.87	-10.78
LV082	39 38.84	119 49.31	5000.0	979668.56	1.09	-169.45	0.25	1.03	-169.83	-9.53
LV084	39 38.91	119 49.65	4921.0	979672.38	-2.63	-170.47	0.19	1.01	-170.86	-10.50
LV088	39 38.62	119 50.04	4925.0	979671.44	-2.73	-170.70	0.01	0.83	-171.27	-10.79
LV090	39 38.34	119 49.73	5022.0	979665.81	1.16	-170.13	0.14	0.99	-170.55	-10.07
LV094	39 37.99	119 51.77	4986.0	979664.94	-2.60	-172.65	0.01	0.89	-173.17	-12.37
LV096	39 37.53	119 51.76	5024.0	979662.19	-1.09	-172.44	0.02	1.02	-172.83	-11.92
LV099	39 37.75	119 50.69	4977.0	979666.81	-1.20	-170.95	0.07	1.00	-171.36	-10.60
LV102	39 38.17	119 50.56	4951.0	979669.19	-1.90	-170.76	0.02	0.86	-171.30	-10.66
LV106	39 37.87	119 52.69	5035.0	979659.38	-3.39	-175.11	0.01	1.07	-175.46	-14.58
LV109	39 38.39	119 52.83	4985.0	979661.56	-6.65	-176.67	0.01	0.96	-177.12	-16.33
LV112	39 38.87	119 52.85	4993.0	979661.12	-7.06	-177.35	0.01	0.83	-177.93	-17.26
LV117	39 39.43	119 53.10	4988.0	979660.50	-8.95	-179.08	0.01	0.77	-179.72	-19.22
LV119	39 38.93	119 53.22	4974.0	979659.69	-10.37	-180.02	0.01	0.89	-180.53	-19.85
LV122	39 38.08	119 53.44	5030.0	979656.31	-7.20	-178.75	0.01	1.20	-178.97	-18.06
LV125	39 38.39	119 53.59	4967.0	979656.19	-13.71	-183.11	0.01	1.17	-183.35	-22.49
LV127	39 38.16	119 54.15	4971.0	979653.12	-16.08	-185.63	0.01	1.53	-185.50	-24.54
LV132	39 37.76	119 54.88	5018.0	979651.19	-12.96	-184.11	0.02	2.58	-182.94	-21.85
LV135	39 38.59	119 55.48	4970.0	979656.00	-13.94	-183.45	0.24	2.92	-181.94	-21.01
LV137	39 39.15	119 55.35	4971.0	979656.38	-14.25	-183.79	0.03	1.80	-183.40	-22.66
LV141	39 39.10	119 54.72	4968.0	979653.12	-17.73	-187.17	0.01	1.22	-187.35	-26.60
LV143	39 39.56	119 54.72	4982.0	979654.75	-15.50	-185.42	0.01	1.07	-185.76	-25.15
LV144	39 39.50	119 54.25	4977.0	979654.56	-16.02	-185.77	0.01	0.95	-186.23	-25.62
LV145	39 39.11	119 54.25	4970.0	979653.25	-17.46	-186.97	0.01	1.06	-187.32	-26.60
LV146	39 40.65	119 51.52	5081.0	979660.00	-2.55	-175.85	0.02	0.63	-176.64	-16.66
LV148	39 41.04	119 51.90	5123.0	979656.06	-3.12	-177.85	0.02	0.65	-178.62	-18.72
LV150	39 41.41	119 52.36	5083.0	979656.31	-7.17	-180.53	0.02	0.70	-181.25	-21.41
LV152	39 41.89	119 52.36	5109.0	979657.00	-4.77	-179.02	0.03	0.74	-179.70	-19.99
LV155	39 42.49	119 52.41	5105.0	979659.25	-3.76	-177.88	0.02	0.80	-178.50	-18.95
LV158	39 43.18	119 51.98	5131.0	979660.38	-1.23	-176.23	0.02	0.88	-176.78	-17.51
LV159	39 43.57	119 52.01	5140.0	979658.62	-2.66	-177.97	0.01	0.88	-178.52	-19.34
LV160	39 43.22	119 52.60	5152.0	979654.00	-5.70	-181.41	0.02	0.79	-182.05	-22.74
LV161	39 43.14	119 53.07	5154.0	979651.19	-8.19	-183.97	0.05	0.85	-184.55	-25.18
LV164	39 42.50	119 54.15	5262.0	979644.75	-3.54	-183.01	0.07	0.87	-183.58	-23.96
LV166	39 42.01	119 54.45	5132.0	979652.31	-7.46	-182.50	0.03	0.87	-183.05	-23.22
LV169	39 41.64	119 54.16	5072.0	979654.25	-10.62	-183.61	0.02	0.81	-184.22	-24.29
LV170	39 41.66	119 53.59	5037.0	979655.31	-12.84	-184.64	0.01	0.78	-185.27	-25.36
LV171	39 41.66	119 52.94	5041.0	979656.12	-11.64	-183.57	0.01	0.74	-184.24	-24.39
LV173	39 41.19	119 55.04	5189.0	979650.44	-2.75	-179.73	0.04	0.83	-180.33	-20.27
LV174	39 41.25	119 54.14	5051.0	979655.25	-11.01	-183.28	0.01	0.78	-183.92	-23.88
LV175	39 41.25	119 54.58	5142.0	979651.12	-6.59	-181.96	0.05	0.79	-182.60	-22.56
LV176	39 40.78	119 55.26	5177.0	979651.44	-2.28	-178.85	0.03	0.86	-179.42	-19.26
LV178	39 40.23	119 55.20	5157.0	979648.38	-6.37	-182.25	0.06	0.95	-182.73	-22.38
LV179	39 39.92	119 55.28	5080.0	979652.00	-9.56	-182.82	0.03	1.07	-183.17	-22.69
LV181	39 40.33	119 51.89	5070.0	979659.88	-3.19	-176.11	0.01	0.61	-176.92	-16.81
LV185	39 42.07	119 53.84	5098.0	979652.69	-10.35	-184.22	0.03	0.80	-184.84	-25.07
LV187	39 42.06	119 53.26	5055.0	979655.81	-11.23	-183.64	0.01	0.77	-184.29	-24.53
LV189	39 42.06	119 52.69	5065.0	979657.50	-8.61	-181.36	0.01	0.77	-182.01	-22.30

Table 2. Principal facts of gravity stations in the Antelope Valley–Bedell Flat area.— Continued

Station	Lat deg min	Long deg min	Elev ft	OG mGal	FAA mGal	SBA mGal	TC inner mGal	TC total mGal	CBA mGal	ISO mGal
LV191	39 42.13	119 51.11	5590.0	979634.00	17.12	-173.54	0.26	1.59	-173.42	-14.05
LV194	39 44.19	119 51.27	5223.0	979656.94	2.49	-175.65	0.06	1.03	-176.05	-17.15
LV195	39 44.52	119 50.51	5426.0	979648.94	13.10	-171.96	0.09	0.99	-172.43	-13.75
LV196	39 42.11	119 55.11	5200.0	979653.38	-0.16	-177.51	0.27	1.21	-177.74	-17.94
LV197	39 41.64	119 55.65	5390.0	979641.75	6.83	-177.01	0.07	0.96	-177.50	-17.61
LV198	39 39.91	119 54.57	5011.0	979654.38	-13.65	-184.56	0.02	0.93	-185.04	-24.56
LV199	39 39.90	119 54.16	4982.0	979655.69	-15.01	-184.93	0.01	0.87	-185.47	-25.00
LV202	39 40.67	119 54.29	5031.0	979655.50	-11.78	-183.37	0.02	0.81	-183.97	-23.77
LV204	39 40.26	119 54.56	5050.0	979653.38	-11.46	-183.69	0.03	0.86	-184.25	-23.90
LV209	39 40.90	119 56.19	5368.0	979643.44	7.52	-175.56	0.09	0.98	-176.03	-15.90
LV210	39 41.21	119 56.65	5494.0	979636.19	11.66	-175.72	0.25	1.29	-175.90	-15.89
LV213	39 39.56	119 55.77	5150.0	979649.81	-4.61	-180.26	0.06	1.51	-180.18	-19.60
LV214	39 39.90	119 53.70	4985.0	979656.31	-14.13	-184.15	0.01	0.79	-184.77	-24.33
LV215	39 40.63	119 53.31	5001.0	979657.12	-12.86	-183.43	0.01	0.71	-184.13	-23.99
LV216	39 41.11	119 53.28	5016.0	979656.81	-12.50	-183.58	0.01	0.72	-184.27	-24.24
LV220	39 39.73	119 51.83	5047.0	979663.38	-1.01	-173.15	0.04	0.66	-173.91	-13.61
LV221	39 40.32	119 52.65	5026.0	979657.69	-9.53	-180.95	0.01	0.65	-181.71	-21.53
LV222	39 40.85	119 52.74	5035.0	979656.88	-10.26	-181.99	0.01	0.67	-182.73	-22.70
LV223	39 39.78	119 52.58	5021.0	979660.62	-6.26	-177.51	0.01	0.67	-178.25	-17.87
LV224	39 39.84	119 53.03	5001.0	979659.25	-9.58	-180.15	0.01	0.71	-180.85	-20.48
LV229	39 37.79	119 49.33	5270.0	979648.75	8.19	-171.55	0.09	0.86	-172.13	-11.66
LV231	39 37.55	119 53.57	5130.0	979650.50	-2.81	-177.78	0.03	1.55	-177.66	-16.64
LV234	39 42.23	119 48.01	5555.0	979635.31	15.00	-174.46	0.39	1.58	-174.35	-15.30
Q 898	39 42.51	119 47.35	5268.0	979651.88	4.18	-175.49	0.09	0.85	-176.08	-17.14
Q 899	39 38.89	119 47.59	5248.0	979653.31	9.08	-169.91	0.08	0.89	-170.46	-10.46
X6456	39 54.91	119 39.92	6566.0	979595.69	51.56	-172.39	2.48	13.05	-160.85	-6.83
X6457	39 55.94	119 43.43	6194.0	979630.69	50.09	-161.17	0.68	5.55	-157.12	-2.83
X6458	39 58.72	119 41.19	7443.0	979541.31	73.94	-179.92	1.29	16.25	-165.17	-12.33
X6459	39 58.56	119 44.59	8722.0	979455.31	108.37	-189.11	1.31	27.04	-163.47	-10.56
X6460	39 50.19	119 44.04	5225.0	979674.44	11.30	-166.90	1.41	4.40	-163.94	-7.59
930172	39 37.91	119 56.70	5423.0	979630.88	4.56	-180.40	0.22	2.83	-179.02	-18.03
H1099	39 41.52	119 39.25	5591.0	979630.25	14.39	-176.30	1.16	3.28	-174.49	-16.51
H1106	39 39.87	119 57.46	5274.0	979644.88	1.67	-178.20	0.91	2.01	-177.63	-17.12

Data from Carpenter (written commun, 1998)

1	39 44.64	119 50.18	5302.4	979653.88	6.21	-174.63	0.21	1.20	-174.87	-16.21
2	39 44.74	119 49.95	5180.6	979659.75	0.49	-176.20	0.14	1.32	-176.31	-17.66
3	39 44.89	119 49.74	5124.1	979662.88	-1.90	-176.67	0.07	1.28	-176.81	-18.21
4	39 44.71	119 49.57	5122.9	979663.38	-1.26	-175.98	0.02	1.10	-176.30	-17.67
5	39 44.51	119 49.50	5150.7	979661.00	-0.67	-176.34	0.06	1.09	-176.67	-18.00
6	39 44.30	119 49.53	5213.5	979657.25	1.78	-176.03	0.14	1.13	-176.33	-17.63
7	39 44.09	119 49.57	5270.9	979652.88	3.12	-176.65	0.25	1.24	-176.84	-18.12
8	39 43.86	119 49.69	5366.0	979647.38	6.87	-176.15	0.52	1.47	-176.12	-17.35
9	39 43.66	119 49.70	5455.2	979641.62	9.79	-176.27	0.34	1.23	-176.49	-17.71
10	39 44.77	119 49.19	5125.2	979664.12	-0.35	-175.15	0.01	0.91	-175.66	-17.10
11	39 44.20	119 49.11	5196.9	979658.12	1.24	-176.01	0.07	1.03	-176.40	-17.70
12	39 44.41	119 48.57	5192.5	979658.50	0.91	-176.19	0.03	0.83	-176.79	-18.21
13	39 44.54	119 48.30	5261.0	979655.38	3.96	-175.47	0.08	0.82	-176.08	-17.58
14	39 44.56	119 48.04	5350.6	979650.50	7.52	-174.96	0.21	0.98	-175.43	-17.01
15	39 44.43	119 47.66	5514.8	979640.44	13.10	-174.99	0.10	1.06	-175.38	-17.01
16	39 44.66	119 48.46	5210.9	979658.44	2.19	-175.54	0.05	0.82	-176.14	-17.64
17	39 45.00	119 48.46	5228.4	979658.25	3.12	-175.20	0.06	0.84	-175.79	-17.39
18	39 45.23	119 49.36	5113.8	979664.56	-1.68	-176.09	0.00	1.04	-176.47	-18.03
19	39 45.66	119 49.31	5113.9	979665.38	-1.47	-175.89	0.00	1.13	-176.18	-17.84
20	39 45.91	119 49.45	5124.3	979665.62	-0.60	-175.37	0.01	1.34	-175.45	-17.18
21	39 45.70	119 49.60	5128.8	979664.25	-1.26	-176.19	0.05	1.45	-176.16	-17.80
22	39 46.00	119 49.69	5144.0	979665.50	0.98	-174.46	0.12	1.85	-174.03	-15.76
23	39 46.11	119 49.23	5136.9	979666.50	1.13	-174.07	0.00	1.15	-174.34	-16.15

Table 2. Principal facts of gravity stations in the Antelope Valley–Bedell Flat area.— Continued

Station	Lat deg min	Long deg min	Elev ft	OG mGal	FAA mGal	SBA mGal	TC		CBA mGal	ISO mGal
							inner mGal	total mGal		
24	39 46.13	119 48.77	5150.8	979666.88	2.82	-172.86	0.00	0.92	-173.36	-15.23
25	39 46.23	119 48.47	5162.8	979666.56	3.45	-172.64	0.03	0.91	-173.15	-15.10
26	39 46.23	119 48.20	5252.7	979661.94	7.30	-171.85	0.13	0.94	-172.35	-14.36
27	39 46.25	119 47.85	5381.2	979655.12	12.51	-171.02	0.10	0.94	-171.52	-13.63
28	39 46.48	119 48.76	5193.5	979665.56	4.95	-172.18	0.04	0.92	-172.69	-14.69
29	39 46.64	119 48.53	5200.8	979665.62	5.45	-171.93	0.02	0.83	-172.52	-14.60
30	39 46.66	119 48.25	5190.1	979665.75	4.55	-172.47	0.01	0.83	-173.07	-15.19
31	39 46.66	119 47.59	5278.7	979662.31	9.46	-170.57	0.06	0.90	-171.11	-13.32
32	39 46.67	119 47.91	5223.8	979664.94	6.90	-171.27	0.03	0.85	-171.84	-14.01
33	39 45.75	119 48.75	5145.7	979665.50	1.50	-174.00	0.01	0.91	-174.52	-16.28
34	39 45.44	119 48.59	5165.2	979664.12	2.42	-173.74	0.03	0.90	-174.27	-15.95
35	39 46.64	119 48.91	5204.7	979665.12	5.36	-172.15	0.08	1.01	-172.57	-14.62
36	39 46.65	119 49.18	5142.8	979667.44	1.85	-173.56	0.01	1.26	-173.72	-15.73
37	39 46.65	119 49.46	5176.2	979663.44	0.96	-175.58	0.02	1.57	-175.43	-17.42
38	39 46.64	119 49.73	5225.5	979660.44	2.61	-175.61	0.07	2.11	-174.93	-16.90
39	39 46.45	119 49.93	5273.7	979657.38	4.33	-175.53	0.15	2.60	-174.36	-16.25
40	39 46.17	119 49.74	5176.2	979664.00	2.24	-174.30	0.10	1.99	-173.74	-15.55
41	39 46.18	119 49.52	5138.9	979666.00	0.74	-174.53	0.02	1.56	-174.39	-16.20
42	39 46.46	119 49.31	5146.0	979666.00	0.94	-174.57	0.01	1.34	-174.65	-16.55
43	39 47.00	119 49.32	5175.2	979664.62	1.56	-174.94	0.02	1.45	-174.92	-17.01
44	39 47.24	119 49.32	5197.4	979664.50	3.15	-174.11	0.04	1.50	-174.04	-16.19
45	39 47.48	119 49.32	5251.5	979662.38	5.75	-173.36	0.39	1.80	-172.99	-15.22
46	39 47.31	119 49.61	5263.9	979660.19	4.96	-174.57	0.10	1.98	-174.02	-16.18
47	39 47.47	119 49.76	5351.3	979655.25	8.01	-174.51	0.21	2.31	-173.64	-15.85
48	39 47.57	119 50.08	5574.7	979641.12	14.71	-175.42	1.54	3.97	-172.91	-15.18
49	39 47.92	119 49.83	5573.1	979644.06	17.02	-173.05	0.23	1.89	-172.63	-15.02
50	39 48.33	119 49.70	5517.9	979649.56	16.70	-171.50	0.11	1.35	-171.60	-14.09
51	39 48.70	119 49.89	5405.0	979656.31	12.32	-172.03	0.28	1.53	-171.94	-14.49
52	39 48.97	119 50.05	5317.8	979660.75	8.12	-173.25	0.14	1.32	-173.36	-15.97
53	39 49.26	119 50.13	5223.3	979662.06	0.15	-178.00	0.06	1.12	-178.31	-20.95
54	39 49.70	119 50.21	5124.8	979664.81	-7.03	-181.82	0.01	0.94	-182.29	-25.04
55	39 50.10	119 50.34	5103.4	979666.12	-8.30	-182.36	0.01	0.87	-182.91	-25.72
56	39 49.56	119 48.46	5272.1	979665.69	7.93	-171.88	0.02	0.81	-172.50	-15.44
57	39 49.15	119 48.39	5293.1	979663.25	8.08	-172.44	0.03	0.83	-173.05	-15.88
58	39 48.71	119 48.34	5325.0	979660.38	8.85	-172.77	0.03	0.84	-173.37	-16.06
59	39 48.30	119 48.43	5271.1	979663.25	7.24	-172.54	0.17	1.09	-172.89	-15.43
60	39 48.27	119 47.64	5266.0	979662.62	6.21	-173.39	0.06	0.89	-173.94	-16.57
61	39 47.91	119 47.81	5240.3	979663.50	5.20	-173.53	0.01	0.88	-174.08	-16.58
62	39 47.88	119 48.52	5212.6	979666.12	5.27	-172.51	0.03	1.00	-172.94	-15.35
63	39 47.50	119 48.76	5157.3	979668.38	2.85	-173.05	0.02	1.11	-173.36	-15.62
64	39 47.07	119 48.76	5148.8	979668.75	3.10	-172.51	0.01	1.02	-172.91	-15.04
65	39 50.14	119 50.72	5128.6	979664.56	-7.56	-182.48	0.01	0.90	-183.01	-25.83
66	39 49.87	119 51.11	5177.2	979661.44	-5.74	-182.31	0.06	1.04	-182.70	-25.44
67	39 49.56	119 51.38	5224.0	979657.69	-4.63	-182.80	0.09	1.14	-183.09	-25.72
68	39 49.66	119 51.63	5307.7	979653.31	-1.29	-182.32	0.16	1.07	-182.68	-25.32
69	39 49.65	119 51.93	5392.4	979649.50	2.90	-181.02	0.09	0.97	-181.50	-24.18
70	39 49.25	119 51.74	5262.0	979654.88	-3.39	-182.85	0.05	1.24	-183.05	-25.57
71	39 49.02	119 52.20	5327.7	979650.88	-0.90	-182.61	0.03	1.18	-182.87	-25.30
72	39 48.71	119 52.70	5371.0	979649.19	1.95	-181.24	0.13	1.35	-181.33	-23.63
73	39 48.43	119 53.12	5423.1	979648.31	6.39	-178.57	0.09	1.30	-178.72	-20.94
74	39 48.18	119 53.54	5493.8	979644.50	9.58	-177.80	0.17	1.40	-177.85	-19.98
75	39 48.02	119 54.15	5669.8	979633.62	15.53	-177.84	0.15	1.31	-178.00	-20.10
76	39 48.82	119 53.31	5529.0	979642.56	10.04	-178.53	0.07	1.06	-178.93	-21.29
77	39 49.07	119 53.59	5708.8	979632.38	16.38	-178.32	0.11	1.14	-178.66	-21.13
101	39 50.55	119 49.92	5053.3	979673.75	-6.08	-178.43	0.00	0.82	-179.02	-21.99
103	39 51.04	119 49.02	5064.3	979677.38	-2.16	-174.89	0.01	0.91	-175.39	-18.61
104	39 51.35	119 48.62	5127.8	979674.31	0.33	-174.56	0.03	1.08	-174.91	-18.27
105	39 51.68	119 48.27	5290.7	979666.69	7.50	-172.95	0.09	1.37	-173.02	-16.56
106	39 52.01	119 47.91	5496.3	979656.12	15.78	-171.68	0.13	1.91	-171.23	-14.99

Table 2. Principal facts of gravity stations in the Antelope Valley–Bedell Flat area.— Continued

Station	Lat deg min	Long deg min	Elev ft	OG mGal	FAA mGal	SBA mGal	TC inner mGal	TC total mGal	CBA mGal	ISO mGal
107	39 52.34	119 47.68	5701.1	979645.62	24.03	-170.41	0.14	2.60	-169.28	-13.26
108	39 52.63	119 47.47	5816.7	979641.38	30.20	-168.18	1.56	4.92	-164.74	-8.85
109	39 52.03	119 47.45	5605.3	979651.31	21.21	-169.97	0.18	2.35	-169.09	-12.95
110	39 51.68	119 47.12	5590.7	979652.50	21.51	-169.17	0.18	2.24	-168.39	-12.18
111	39 51.33	119 46.80	5564.0	979654.06	21.08	-168.68	0.15	2.12	-168.03	-11.73
112	39 51.72	119 46.66	5828.7	979638.31	29.65	-169.14	0.66	3.71	-166.91	-10.83
113	39 50.96	119 47.03	5461.4	979658.38	16.32	-169.95	0.20	1.60	-169.80	-13.33
114	39 50.82	119 47.45	5252.0	979669.50	7.95	-171.17	0.07	1.17	-171.43	-14.80
115	39 50.90	119 47.92	5176.2	979673.38	4.56	-171.98	0.03	1.10	-172.31	-15.64
116	39 50.56	119 48.28	5152.2	979675.12	4.58	-171.14	0.07	1.00	-171.56	-14.73
117	39 51.07	119 48.44	5129.7	979674.62	1.19	-173.77	0.02	0.99	-174.19	-17.49
118	39 51.28	119 48.94	5074.7	979676.88	-2.00	-175.08	0.01	0.99	-175.50	-18.79
119	39 51.53	119 49.40	5016.9	979678.75	-5.97	-177.07	0.01	1.05	-177.43	-20.73
120	39 51.72	119 49.90	4992.6	979678.00	-9.23	-179.51	0.00	1.04	-179.87	-23.16
121	39 51.93	119 50.41	4974.5	979677.12	-12.15	-181.82	0.00	1.09	-182.13	-25.45
122	39 52.24	119 50.55	4972.4	979677.38	-12.53	-182.12	0.01	1.19	-182.34	-25.74
123	39 52.60	119 50.24	5041.5	979675.75	-8.23	-180.18	0.05	1.35	-180.24	-23.81
124	39 52.98	119 49.99	5151.0	979673.62	-0.62	-176.30	0.12	1.70	-176.02	-19.76
125	39 53.38	119 49.77	5300.4	979668.06	7.28	-173.50	0.15	2.22	-172.72	-16.65
126	39 53.75	119 49.45	5495.6	979659.38	16.37	-171.06	0.73	3.67	-168.85	-12.99
127	39 53.57	119 50.23	5380.8	979662.88	9.37	-174.15	0.13	1.90	-173.69	-17.65
128	39 53.69	119 50.76	5349.0	979663.75	7.06	-175.37	0.11	1.80	-175.01	-18.94
129	39 53.60	119 51.37	5172.0	979671.00	-2.17	-178.57	0.11	1.67	-178.32	-22.11
130	39 53.64	119 51.93	5038.1	979678.12	-7.72	-179.55	0.05	1.59	-179.37	-23.09
131	39 53.77	119 52.43	4962.6	979684.81	-8.30	-177.56	0.06	1.60	-177.36	-21.08
132	39 54.10	119 52.38	5090.6	979676.62	-4.93	-178.55	0.75	2.39	-177.57	-21.42
133	39 54.07	119 52.92	4887.6	979690.38	-10.21	-176.90	0.08	1.81	-176.49	-20.22
134	39 54.07	119 53.58	4820.0	979690.19	-16.75	-181.14	0.03	1.53	-181.00	-24.66
135	39 53.79	119 53.40	4829.4	979687.44	-18.21	-182.92	0.03	1.63	-182.68	-26.25
136	39 53.43	119 52.99	4855.2	979683.75	-18.94	-184.53	0.08	1.90	-184.03	-27.55
137	39 53.08	119 52.67	4871.1	979681.69	-18.98	-185.11	0.23	2.30	-184.20	-27.67
138	39 52.78	119 53.07	5176.1	979667.06	-4.52	-181.05	1.72	3.24	-179.24	-22.69
139	39 52.70	119 52.06	4910.2	979680.25	-16.22	-183.69	0.08	1.91	-183.17	-26.58
140	39 52.98	119 51.94	4940.8	979678.25	-15.77	-184.28	0.03	1.47	-184.21	-27.71
141	39 52.41	119 51.62	4923.5	979679.62	-15.18	-183.10	0.04	1.68	-182.82	-26.19
142	39 52.16	119 51.14	4946.2	979677.81	-14.45	-183.14	0.02	1.33	-183.21	-26.51
143	39 51.88	119 50.78	4982.5	979675.75	-12.71	-182.64	0.01	1.11	-182.93	-26.18
144	39 51.45	119 50.70	5024.1	979673.50	-10.42	-181.77	0.01	1.00	-182.18	-25.32
145	39 51.02	119 50.63	5064.4	979670.81	-8.67	-181.40	0.01	0.91	-181.90	-24.94
1003	39 44.89	119 49.74	5124.0	979662.88	-1.92	-176.68	0.07	1.28	-176.82	-18.22
1028	39 46.48	119 48.76	5193.7	979665.56	4.96	-172.18	0.04	0.92	-172.69	-14.69
1067	39 49.56	119 51.38	5224.0	979657.62	-4.65	-182.82	0.09	1.14	-183.11	-25.74
4444	39 44.59	119 50.45	5415.7	979647.88	10.94	-173.77	0.12	1.03	-174.19	-15.53
5555	39 50.45	119 50.49	5087.5	979667.88	-8.55	-182.06	0.01	0.86	-182.61	-25.50

USGS data

00REN001	39 56.71	119 55.80	4573.5	979714.38	-19.64	-175.62	0.02	1.48	-175.49	-19.81
00REN002	39 56.90	119 57.29	4488.2	979714.62	-27.75	-180.82	0.03	1.91	-180.25	-24.53
00REN003	39 56.97	119 58.08	4445.5	979714.12	-32.32	-183.93	0.05	2.08	-183.19	-27.45
00REN004	39 56.91	119 58.95	4452.1	979710.75	-35.01	-186.85	0.07	1.91	-186.27	-30.50
00REN005	39 52.94	119 58.03	4773.6	979687.19	-22.44	-185.25	0.09	1.93	-184.71	-27.82
00REN006	39 53.71	119 58.78	4662.1	979690.62	-30.61	-189.61	0.02	1.86	-189.12	-32.41
00REN007	39 52.39	119 57.72	4842.5	979683.56	-18.78	-183.94	0.07	2.05	-183.28	-26.27
00REN008	39 51.99	119 56.63	4829.4	979685.69	-17.31	-182.02	0.09	1.45	-181.96	-24.84
00REN009	39 48.18	119 54.72	5692.3	979632.38	16.12	-178.02	0.10	1.31	-178.18	-20.30
00REN010	39 49.00	119 54.52	5757.9	979629.62	18.30	-178.08	0.03	1.17	-178.38	-20.79
00REN011	39 49.58	119 54.72	5741.5	979630.88	17.17	-178.65	0.05	1.40	-178.73	-21.28
00REN012	39 50.70	119 53.37	6106.8	979607.00	25.95	-182.33	0.46	3.44	-180.39	-23.47

Table 2. Principal facts of gravity stations in the Antelope Valley–Bedell Flat area.— Continued

Station	Lat deg min	Long deg min	Elev ft	OG mGal	FAA mGal	SBA mGal	TC inner mGal	TC total mGal	CBA mGal	ISO mGal
00REN013	39 52.08	119 53.48	5720.9	979634.88	15.56	-179.56	0.11	1.79	-179.25	-22.62
00REN014	39 46.41	119 53.49	5661.8	979628.88	12.41	-180.69	0.10	1.39	-180.77	-22.50
00REN015	39 51.74	119 48.21	5327.5	979664.88	9.07	-172.63	0.10	1.44	-172.64	-16.22
00REN016	39 55.01	119 54.04	5079.1	979677.44	-6.55	-179.78	0.75	1.68	-179.52	-23.56
00REN017	39 55.46	119 54.12	4886.7	979691.75	-11.01	-177.68	0.06	1.23	-177.84	-21.98
00REN018	39 55.42	119 52.90	5265.2	979672.62	5.47	-174.10	0.15	1.69	-173.85	-18.16
00REN019	39 56.83	119 52.79	5282.4	979678.19	10.58	-169.59	0.26	2.32	-168.71	-13.46
00REN020	39 57.44	119 53.25	5158.9	979690.75	10.67	-165.28	0.34	1.85	-164.86	-9.74
00REN021	39 56.56	119 54.21	4792.3	979705.50	-7.76	-171.21	0.05	1.29	-171.30	-15.71
00REN022	39 51.57	119 48.39	5226.6	979669.81	4.77	-173.49	0.08	1.25	-173.68	-17.15
00REN023	39 51.30	119 48.12	5238.6	979669.00	5.51	-173.16	0.07	1.17	-173.41	-16.83
00REN024	39 50.68	119 47.16	5291.6	979667.25	9.63	-170.84	0.06	1.17	-171.11	-14.48
00REN025	39 50.42	119 46.71	5152.6	979674.44	4.14	-171.60	0.23	1.54	-171.48	-14.82
00REN026	39 50.15	119 46.36	5040.2	979680.56	0.13	-171.77	0.12	1.45	-171.73	-15.01
00REN027	39 50.04	119 45.89	4947.8	979684.94	-4.05	-172.80	0.11	1.51	-172.69	-15.95
00REN028	39 50.01	119 45.47	4877.4	979690.75	-4.80	-171.15	0.07	1.43	-171.11	-14.39
00REN029	39 49.81	119 46.73	5129.8	979675.50	3.98	-170.98	0.17	1.27	-171.13	-14.31
00REN030	39 49.47	119 47.05	5234.5	979667.88	6.73	-171.80	0.11	1.01	-172.22	-15.27
00REN031	39 48.97	119 47.39	5242.0	979665.56	5.81	-172.98	0.01	0.84	-173.57	-16.43
00REN032	39 48.91	119 47.67	5261.3	979664.69	6.84	-172.60	0.03	0.82	-173.22	-16.02
00REN033	39 48.85	119 47.95	5292.9	979663.00	8.21	-172.31	0.03	0.80	-172.95	-15.72
00REN034	39 48.81	119 48.21	5308.0	979661.56	8.27	-172.77	0.02	0.81	-173.40	-16.13
00REN035	39 48.59	119 47.11	5292.8	979663.19	8.80	-171.72	0.02	0.89	-172.26	-15.07
00REN036	39 48.17	119 46.72	5484.8	979652.12	16.36	-170.70	0.27	1.35	-170.80	-13.60
00REN037	39 47.58	119 46.35	5747.0	979636.19	25.97	-170.04	0.09	1.77	-169.74	-12.51
00REN038	39 47.82	119 46.20	5829.5	979631.81	29.02	-169.80	0.21	2.36	-168.92	-11.80
00REN039	39 47.74	119 45.98	6009.0	979618.69	32.88	-172.07	1.52	5.26	-168.30	-11.24
00REN040	39 48.20	119 46.10	5800.0	979633.88	27.75	-170.06	0.19	2.32	-169.22	-12.21
00REN041	39 48.24	119 45.68	5847.0	979630.69	28.88	-170.54	0.49	3.36	-168.66	-11.71
00REN042	39 48.08	119 45.40	5667.8	979642.31	23.90	-169.41	0.56	2.79	-168.09	-11.08
00REN043	39 47.84	119 45.08	5394.1	979659.25	15.49	-168.48	0.47	2.04	-167.89	-10.76
00REN044	39 47.65	119 44.62	5055.5	979677.25	1.92	-170.51	0.13	1.24	-170.68	-13.44
00REN045	39 47.65	119 43.80	4835.8	979686.81	-9.16	-174.09	0.09	0.95	-174.53	-17.36
00REN046	39 46.95	119 42.84	4636.0	979694.62	-19.08	-177.19	0.04	0.69	-177.86	-20.55
00REN047	39 48.43	119 42.46	4416.0	979718.25	-18.34	-168.95	0.02	0.93	-169.35	-12.44
00REN048	39 50.13	119 48.71	5161.1	979674.12	5.08	-170.94	0.04	0.87	-171.50	-14.52
00REN049	39 49.67	119 48.74	5251.7	979667.38	7.55	-171.56	0.06	0.85	-172.14	-15.06
00REN050	39 49.69	119 49.05	5223.6	979668.88	6.33	-171.83	0.11	0.91	-172.34	-15.23
00REN051	39 49.72	119 49.32	5179.8	979671.06	4.35	-172.31	0.11	0.94	-172.80	-15.67
00REN052	39 49.72	119 49.54	5133.2	979672.38	1.33	-173.74	0.10	0.99	-174.18	-17.02
00REN053	39 49.73	119 49.79	5111.4	979670.06	-3.08	-177.41	0.03	0.96	-177.88	-20.68
00REN054	39 49.80	119 50.10	5105.1	979666.81	-7.01	-181.12	0.01	0.93	-181.62	-24.40
00REN055	39 49.88	119 50.28	5107.2	979665.69	-8.04	-182.23	0.02	0.92	-182.72	-25.49
00REN056	39 49.43	119 49.90	5179.8	979666.00	-0.23	-176.89	0.07	1.05	-177.27	-19.99
00REN057	39 49.27	119 50.13	5221.4	979662.31	0.19	-177.89	0.07	1.12	-178.20	-20.84
00REN058	39 49.21	119 50.37	5215.3	979660.38	-2.21	-180.08	0.07	1.25	-180.26	-22.87
00REN059	39 46.89	119 49.32	5167.4	979664.75	1.10	-175.14	0.03	1.45	-175.11	-17.16
00REN060	39 46.89	119 49.07	5144.4	979667.25	1.43	-174.03	0.01	1.21	-174.24	-16.30
00REN061	39 46.65	119 48.91	5203.2	979665.31	5.37	-172.09	0.14	1.07	-172.44	-14.49
00REN062	39 46.75	119 48.75	5184.1	979666.75	4.85	-171.96	0.10	1.00	-172.39	-14.47
00REN063	39 46.89	119 48.75	5162.5	979668.00	3.87	-172.20	0.04	0.99	-172.64	-14.74
00REN064	39 45.47	119 48.74	5144.2	979665.06	1.34	-174.11	0.03	0.91	-174.63	-16.30
00REN065	39 45.36	119 48.97	5123.2	979665.62	0.05	-174.68	0.02	0.93	-175.17	-16.79
00REN066	39 45.31	119 49.32	5112.8	979665.31	-1.14	-175.52	0.02	1.06	-175.88	-17.45
00REN067	39 47.65	119 48.81	5174.8	979667.50	3.38	-173.11	0.13	1.27	-173.27	-15.58
00REN068	39 51.72	119 48.60	5212.3	979670.12	3.55	-174.22	0.09	1.29	-174.36	-17.85
00REN069	39 51.92	119 49.04	5092.3	979676.25	-1.90	-175.58	0.06	1.35	-175.65	-19.12
00REN070	39 52.12	119 49.53	5044.4	979677.69	-5.28	-177.32	0.03	1.30	-177.43	-20.92
00REN071	39 52.31	119 50.02	5009.8	979677.94	-8.56	-179.42	0.03	1.29	-179.55	-23.05

Table 2. Principal facts of gravity stations in the Antelope Valley–Bedell Flat area.— Continued

Station	Lat deg min	Long deg min	Elev ft	OG mGal	FAA mGal	SBA mGal	TC inner mGal	TC total mGal	CBA mGal	ISO mGal
00REN072	39 52.62	119 49.67	5095.2	979675.94	-3.01	-176.79	0.07	1.63	-176.58	-20.26
00REN073	39 52.95	119 49.29	5306.5	979666.75	7.18	-173.81	0.34	2.32	-172.93	-16.79
00REN074	39 53.21	119 48.85	5683.2	979645.56	20.99	-172.85	0.60	3.28	-171.04	-15.12
00REN075	39 53.43	119 48.34	6259.8	979614.25	43.59	-169.91	0.76	5.21	-166.20	-10.57
00REN076	39 53.79	119 47.91	6842.9	979579.12	62.68	-170.71	1.29	8.75	-163.47	-8.17
00REN077	39 52.83	119 48.45	5571.8	979652.12	17.67	-172.36	0.64	3.28	-170.55	-14.53
00REN078	39 52.50	119 48.10	5568.6	979652.75	18.46	-171.46	0.39	2.76	-170.16	-14.09
00REN079	39 51.20	119 47.75	5256.2	979670.06	8.38	-170.89	0.08	1.26	-171.07	-14.51
00REN080	39 51.49	119 47.55	5412.7	979661.56	14.15	-170.45	0.11	1.57	-170.33	-13.94
00REN081	39 51.83	119 47.26	5559.6	979654.56	20.44	-169.18	0.24	2.34	-168.30	-12.11
00REN082	39 52.00	119 46.86	5863.2	979637.31	31.49	-168.48	1.19	4.36	-165.60	-9.60
00REN083	39 52.32	119 47.20	5674.0	979649.19	25.09	-168.43	1.14	4.27	-165.63	-9.63
00REN084	39 50.55	119 47.91	5272.7	979668.06	8.88	-170.95	0.24	1.19	-171.20	-14.45
00REN085	39 50.33	119 47.65	5505.4	979653.88	16.90	-170.87	0.20	1.43	-170.89	-14.19
00REN086	39 50.14	119 47.49	5608.7	979646.88	19.85	-171.44	0.10	1.69	-171.22	-14.53
00REN087	39 48.04	119 48.43	5237.1	979664.81	5.98	-172.64	0.03	0.96	-173.11	-15.57
00REN088	39 48.05	119 48.17	5265.5	979663.00	6.84	-172.74	0.07	0.89	-173.29	-15.80
00REN089	39 48.04	119 47.98	5271.5	979662.25	6.70	-173.09	0.07	0.87	-173.65	-16.18
00REN090	39 48.17	119 47.79	5262.0	979663.12	6.47	-172.99	0.16	0.98	-173.44	-16.01
00REN091	39 48.20	119 48.26	5293.9	979661.62	7.94	-172.62	0.10	0.91	-173.14	-15.67
00REN092	39 48.33	119 48.14	5370.4	979657.00	10.27	-172.90	0.22	0.98	-173.37	-15.98
00REN093	39 48.31	119 47.98	5515.3	979646.00	12.93	-175.17	0.94	1.92	-174.72	-17.39
00REN094	39 48.76	119 47.62	5256.3	979664.56	6.47	-172.80	0.03	0.83	-173.40	-16.17
00REN095	39 48.62	119 47.63	5259.8	979664.31	6.78	-172.61	0.03	0.84	-173.20	-15.91
00REN096	39 54.36	119 54.32	4804.9	979692.38	-16.45	-180.33	0.10	1.39	-180.31	-24.00
00REN097	39 54.04	119 55.51	4754.5	979696.62	-16.48	-178.64	0.05	1.44	-178.57	-22.10
00REN098	39 54.04	119 55.51	4742.5	979695.44	-18.75	-180.50	0.04	1.48	-180.39	-23.92
00REN099	39 53.94	119 55.98	4741.0	979692.69	-21.52	-183.22	0.08	1.54	-183.05	-26.51
00REN100	39 53.93	119 56.41	4807.8	979688.19	-19.69	-183.66	0.18	1.50	-183.55	-27.02
00REN101	39 53.57	119 57.05	4702.1	979692.81	-24.47	-184.84	0.48	1.90	-184.31	-27.61
00REN102	39 53.40	119 57.69	4693.4	979693.94	-23.93	-184.00	0.04	1.50	-183.86	-27.09
00REN103	39 53.62	119 54.02	4966.4	979682.38	-10.18	-179.57	0.23	1.29	-179.68	-23.22
00REN104	39 53.36	119 54.44	5036.0	979680.69	-4.92	-176.68	0.17	1.23	-176.87	-20.33
00REN105	39 53.23	119 54.89	4831.4	979689.19	-15.43	-180.21	0.15	1.41	-180.19	-23.53
00REN106	39 54.87	119 54.71	4950.6	979683.75	-12.14	-180.99	0.14	1.18	-181.20	-25.10
00REN107	39 54.80	119 55.21	5275.7	979665.19	-0.01	-179.95	0.82	2.20	-179.18	-23.13
00REN108	39 55.00	119 55.85	5601.1	979643.62	8.69	-182.34	0.40	2.82	-180.98	-25.09
00REN109	39 54.92	119 56.45	6052.7	979611.44	19.05	-187.38	1.33	7.05	-181.83	-26.04
00REN110	39 54.99	119 56.71	6016.3	979614.25	18.38	-186.81	0.86	5.84	-182.46	-26.67
00REN111	39 52.12	119 53.01	5662.1	979638.94	14.00	-179.11	0.47	1.96	-178.62	-22.02
00REN112	39 52.03	119 52.54	5777.7	979631.31	17.38	-179.68	0.56	2.74	-178.42	-21.85
00REN113	39 51.62	119 52.71	5759.3	979633.38	18.30	-178.13	0.25	1.85	-177.76	-21.05
00REN114	39 51.29	119 52.88	5688.4	979637.00	15.75	-178.26	0.35	1.74	-177.99	-21.13
00REN115	39 51.13	119 52.40	5709.0	979635.56	16.52	-178.20	0.48	1.98	-177.69	-20.85
00REN116	39 50.98	119 52.06	5501.7	979646.75	8.47	-179.18	0.22	1.43	-179.20	-22.25
00REN117	39 50.68	119 52.47	5758.8	979631.62	17.90	-178.51	0.43	1.98	-178.00	-21.04
00REN118	39 50.44	119 52.88	5902.9	979621.69	21.88	-179.44	0.21	2.08	-178.85	-21.83
00REN119	39 50.04	119 53.20	5736.8	979631.88	17.05	-178.61	0.34	1.55	-178.54	-21.33
00REN120	39 49.63	119 54.12	5738.5	979631.19	17.14	-178.58	0.05	1.22	-178.83	-21.47
00REN121	39 49.74	119 53.65	5679.0	979635.50	15.67	-178.02	0.24	1.30	-178.19	-20.85
00REN122	39 49.65	119 52.99	5691.1	979633.56	15.02	-179.08	0.22	1.31	-179.25	-21.94
00REN123	39 49.61	119 52.50	5590.3	979638.69	10.75	-179.91	0.20	1.19	-180.19	-22.89
00REN124	39 49.54	119 52.28	5515.3	979642.62	7.71	-180.40	0.16	1.06	-180.79	-23.43
00REN125	39 50.68	119 50.99	5119.7	979667.25	-6.50	-181.12	0.08	1.05	-181.48	-24.38
00REN126	39 50.40	119 51.55	5227.9	979660.62	-2.56	-180.86	0.17	1.23	-181.07	-23.90
00REN127	39 50.27	119 52.23	5425.8	979650.81	6.42	-178.64	0.35	1.51	-178.58	-21.41
00REN128	39 51.21	119 48.78	5099.5	979675.88	-0.60	-174.52	0.02	0.99	-174.95	-18.23
00REN129	39 51.05	119 49.02	5064.4	979677.56	-1.97	-174.70	0.01	0.91	-175.20	-18.41
00REN130	39 50.90	119 49.23	5040.5	979678.50	-3.02	-174.94	0.00	0.88	-175.47	-18.60

Table 2. Principal facts of gravity stations in the Antelope Valley–Bedell Flat area.— Continued

Station	Lat deg min	Long deg min	Elev ft	OG mGal	FAA mGal	SBA mGal	TC inner mGal	TC total mGal	CBA mGal	ISO mGal
00REN131	39 50.74	119 49.45	5037.6	979678.38	-3.18	-174.99	0.00	0.85	-175.56	-18.64
00REN132	39 50.60	119 49.65	5042.9	979677.06	-3.81	-175.81	0.00	0.83	-176.39	-19.41
00REN133	39 50.55	119 49.94	5053.2	979673.69	-6.12	-178.46	0.00	0.82	-179.05	-22.01
00REN134	39 50.51	119 50.20	5068.3	979670.44	-7.92	-180.78	0.00	0.83	-181.37	-24.31
00REN135	39 50.45	119 50.45	5084.7	979668.19	-8.52	-181.94	0.01	0.86	-182.50	-25.39
00REN136	39 51.26	119 50.80	5047.3	979672.25	-9.15	-181.29	0.02	1.01	-181.69	-24.76
00REN137	39 49.28	119 47.18	5226.1	979667.62	5.95	-172.29	0.05	0.94	-172.78	-15.76
00REN138	39 49.30	119 46.90	5214.7	979669.38	6.62	-171.23	0.06	0.98	-171.68	-14.71
00REN139	39 49.31	119 46.63	5289.9	979665.31	9.58	-170.84	0.13	1.06	-171.21	-14.29
00REN140	39 49.32	119 46.34	5397.4	979659.12	13.46	-170.63	0.28	1.45	-170.63	-13.79
00REN141	39 49.33	119 46.11	5530.8	979650.31	17.21	-171.43	0.50	2.35	-170.54	-13.76
00REN142	39 49.40	119 45.91	5296.1	979665.12	9.85	-170.78	0.74	2.02	-170.20	-13.40
00REN143	39 49.37	119 45.61	5116.5	979676.38	4.23	-170.27	0.46	1.77	-169.92	-13.10
00REN144	39 49.34	119 45.33	4967.0	979685.25	-0.90	-170.30	0.27	1.69	-170.01	-13.17
00REN145	39 49.30	119 45.04	4815.3	979694.19	-6.12	-170.35	0.25	1.84	-169.89	-13.03
00REN146	39 49.27	119 44.77	4730.2	979699.12	-9.15	-170.48	0.19	1.81	-170.05	-13.18
00REN147	39 49.08	119 44.27	4620.5	979705.38	-12.90	-170.49	0.25	1.87	-169.97	-13.08
00REN148	39 48.81	119 43.85	4631.2	979704.00	-12.90	-170.86	0.15	1.44	-170.77	-13.85
00REN149	39 48.50	119 43.48	4574.9	979705.31	-16.42	-172.45	0.35	1.56	-172.24	-15.26
00REN150	39 48.23	119 43.20	4588.4	979704.75	-15.30	-171.79	0.36	1.35	-171.80	-14.81
00REN151	39 47.81	119 42.22	4448.2	979715.62	-16.96	-168.67	0.03	0.90	-169.11	-12.06
00REN152	39 46.93	119 41.73	4486.3	979703.31	-24.43	-177.44	0.01	0.84	-177.93	-20.75
00REN153	39 49.49	119 42.83	4352.8	979724.44	-19.63	-168.09	0.02	1.16	-168.25	-11.58
00REN154	39 50.33	119 43.08	4271.2	979736.69	-16.33	-162.00	0.08	1.81	-161.49	-5.02
00REN155	39 51.24	119 43.37	4292.8	979736.44	-15.90	-162.31	0.03	1.78	-161.83	-5.60
00REN156	39 52.08	119 43.63	4313.5	979736.88	-14.71	-161.82	0.03	2.35	-160.79	-4.74
00REN157	39 51.12	119 43.88	4415.1	979727.31	-13.34	-163.93	0.07	2.06	-163.19	-6.86
00REN158	39 50.88	119 44.43	4616.8	979713.69	-7.62	-165.08	0.16	2.18	-164.25	-7.83
00REN159	39 50.50	119 44.75	4774.5	979702.00	-3.91	-166.75	0.17	1.75	-166.38	-9.86
00REN160	39 50.24	119 44.91	4854.9	979696.12	-1.90	-167.48	0.03	1.30	-167.57	-10.99
00REN161	39 50.13	119 44.79	4858.2	979696.06	-1.48	-167.18	0.04	1.20	-167.37	-10.78
00REN162	39 49.94	119 44.62	4908.3	979693.00	0.47	-166.94	0.11	1.15	-167.18	-10.57
00REN163	39 49.80	119 44.45	5018.9	979686.00	4.05	-167.13	0.27	1.46	-167.08	-10.50
00REN164	39 49.55	119 44.27	5112.6	979678.38	5.59	-168.78	1.00	2.71	-167.49	-10.88
00REN165	39 50.18	119 45.64	4970.5	979685.50	-1.55	-171.08	0.20	1.57	-170.91	-14.25
00REN166	39 50.33	119 45.85	5172.3	979673.88	5.55	-170.86	0.70	2.11	-170.17	-13.60
00REN167	39 48.83	119 48.66	5399.0	979655.12	10.33	-173.81	0.23	1.07	-174.19	-16.91
00REN168	39 48.91	119 48.97	5555.7	979646.62	16.49	-172.99	0.37	1.43	-173.02	-15.78
00REN169	39 48.86	119 49.35	5514.7	979649.75	15.84	-172.24	0.34	1.35	-172.35	-15.05
00REN170	39 48.46	119 48.37	5301.9	979661.44	8.07	-172.75	0.13	0.98	-173.21	-15.81
00REN171	39 48.20	119 48.71	5347.7	979657.88	9.26	-173.13	0.45	1.36	-173.22	-15.71
00REN172	39 48.21	119 48.96	5540.1	979647.00	16.44	-172.51	0.32	1.41	-172.56	-15.11
00REN173	39 48.36	119 49.15	5631.0	979642.12	19.88	-172.17	0.16	1.40	-172.24	-14.86
00REN174	39 48.37	119 49.43	5552.3	979647.81	18.12	-171.25	0.12	1.22	-171.49	-14.05
00REN175	39 48.45	119 49.60	5493.6	979651.38	16.03	-171.34	0.09	1.23	-171.57	-14.09
00REN176	39 48.62	119 49.60	5511.4	979650.38	16.46	-171.52	0.19	1.27	-171.70	-14.30
00REN177	39 47.96	119 50.23	5907.2	979622.88	27.16	-174.31	0.60	2.91	-172.88	-15.35
00REN178	39 47.80	119 50.35	6024.8	979614.50	30.09	-175.39	0.87	3.67	-173.21	-15.66
00REN179	39 47.58	119 50.51	6298.8	979595.44	37.10	-177.73	1.12	5.43	-173.81	-16.29
00REN180	39 47.69	119 50.81	6608.8	979575.12	45.74	-179.66	0.99	7.33	-173.85	-16.43
00REN181	39 47.25	119 50.10	5488.6	979646.69	12.70	-174.50	0.61	3.52	-172.44	-14.59
00REN182	39 46.73	119 50.28	5564.8	979640.25	14.15	-175.65	0.75	4.20	-172.91	-14.95
00REN183	39 46.61	119 50.09	5391.4	979650.38	8.15	-175.73	0.38	3.31	-173.87	-15.83
00REN184	39 45.05	119 50.34	5385.1	979648.94	8.49	-175.18	0.38	1.62	-175.00	-16.46
00REN185	39 45.51	119 51.37	5688.0	979633.81	21.14	-172.86	0.65	3.00	-171.33	-12.92
00REN186	39 44.95	119 52.09	5400.0	979646.50	7.58	-176.60	0.76	2.33	-175.71	-16.99
00REN187	39 46.33	119 52.51	5826.8	979623.25	22.37	-176.36	0.91	2.92	-174.93	-16.75
00REN188	39 47.22	119 52.50	5741.0	979621.88	11.63	-184.17	0.11	1.56	-184.09	-26.13
00REN189	39 47.59	119 52.29	5866.0	979618.50	19.45	-180.62	0.49	2.00	-180.10	-22.29

Table 2. Principal facts of gravity stations in the Antelope Valley–Bedell Flat area.— Continued

Station	Lat		Long		Elev ft	OG mGal	FAA mGal	SBA mGal	TC		CBA mGal	ISO mGal
	deg	min	deg	min					inner mGal	total mGal		
00REN190	39	47.66	119	52.09	5889.5	979614.81	17.86	-183.01	0.19	1.83	-182.67	-24.90
00REN191	39	47.53	119	51.90	6004.2	979609.94	23.97	-180.81	0.34	2.43	-179.88	-22.14
00REN192	39	49.06	119	50.63	5325.5	979651.88	-0.15	-181.78	0.16	1.34	-181.88	-24.45
00REN193	39	56.67	119	49.14	5299.0	979684.62	18.86	-161.87	1.03	3.41	-159.90	-4.90
00REN194	39	56.63	119	50.00	5518.0	979671.06	25.89	-162.31	0.91	3.80	-159.97	-4.94
00REN195	39	56.26	119	50.27	5797.0	979652.50	34.10	-163.62	1.71	4.79	-160.31	-5.24
00REN196	39	47.12	119	46.15	5615.9	979644.31	22.46	-169.07	0.13	1.56	-168.98	-11.61
00REN197	39	46.83	119	45.84	5394.0	979657.69	15.43	-168.54	0.24	1.35	-168.64	-11.15
00REN198	39	46.58	119	45.30	5105.6	979674.81	5.80	-168.33	0.13	1.05	-168.70	-11.14
00REN199	39	46.21	119	45.00	4995.4	979676.62	-2.18	-172.55	0.06	0.84	-173.12	-15.42
00REN200	39	45.91	119	44.60	4892.0	979680.88	-7.19	-174.04	0.07	0.76	-174.67	-16.90
00REN201	39	45.76	119	45.01	4989.7	979675.00	-3.68	-173.86	0.09	0.81	-174.45	-16.61
00REN202	39	45.57	119	45.32	5064.5	979670.00	-1.39	-174.12	0.06	0.80	-174.74	-16.82
00REN203	39	44.78	119	45.94	5220.0	979659.25	3.69	-174.34	0.08	0.85	-174.92	-16.77
00REN204	39	44.26	119	46.54	5243.2	979654.12	1.45	-177.37	0.13	0.88	-177.93	-19.58
00REN205	39	43.42	119	46.55	5082.5	979656.44	-10.05	-183.39	0.01	0.62	-184.19	-25.56
00REN206	39	43.79	119	47.20	5205.7	979657.69	2.25	-175.30	0.09	0.80	-175.93	-17.36
00REN207	39	44.06	119	47.62	5371.8	979648.75	8.47	-174.74	0.08	0.79	-175.40	-16.90
00REN208	39	45.95	119	47.86	5458.0	979649.69	14.75	-171.40	0.20	1.17	-171.69	-13.70
00REN209	39	45.54	119	47.99	5357.6	979653.88	10.06	-172.67	0.45	1.40	-172.72	-14.57
00REN210	39	49.83	119	45.29	4849.8	979692.50	-5.38	-170.79	0.06	1.36	-170.82	-14.08
00REN211	39	49.61	119	45.08	4781.4	979696.62	-7.33	-170.41	0.10	1.54	-170.25	-13.47